SEQUENCE LISTING

<110> CINES, Douglas B HIGAZI, Abd Al-Roof

<120> COMPOSITIONS AND METHODS FOR MODULATING MUSCLE CELL AND TISSUE CONTRACTABILITY

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<151> 2000-06-20

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Leu Gln Gln Thr Tyr His Ala His Arg Ser Asp Ala Leu Gln Leu Gly
35 40 45

Leu Gly Lys His Asn Tyr Cys Arg Asn Pro Asp Asn Arg Arg Pro 50 55 60

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Val His Asp Cys Ala Asp Gly Lys

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Cys Pro Lys Lys Phe Gly Gly Gln His Cys Glu Ile Asp Lys Ser Lys 35 40 45

Thr Cys Tyr Glu Gly Asn Gly His Phe Tyr Arg Gly Lys Ala Ser Thr 50 55 60

Asp Thr Met Gly Arg Pro Cys Leu Pro Trp Asn Ser Ala Thr Val Leu 65 70 75 80

Gln Gln Thr Tyr His Ala His Arg Ser Asp Ala Leu Gln Leu Gly Leu 85 90 95

Gly Lys His Asn Tyr Cys Arg Asn Pro Asp Asn Arg Arg Pro Trp
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Cys Tyr Val Gln Val Gly Leu Lys Pro Leu Val Gln Glu Cys Met Val 115 120 125

His Asp Cys Ala Asp Gly Lys Lys Pro Ser Ser Pro Pro Glu Glu Leu 130 135 140

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- Tyr Arg Arg His Arg Gly Gly Ser Val Thr Tyr Val Cys Gly Gly Ser 180 185 190
- Leu Ile Ser Pro Cys Trp Val Ile Ser Ala Thr His Cys Phe Ile Asp 195 200 205
- Tyr Pro Lys Lys Glu Asp Tyr Ile Val Tyr Leu Gly Arg Ser Arg Leu 210 215 220
- Asn Ser Asn Thr Gln Gly Glu Met Lys Phe Glu Val Glu Asn Leu Ile 225 230 235 240
- Leu His Lys Asp Tyr Ser Ala Asp Thr Leu Ala His His Asn Asp Ile
 245 250 255
- Ala Leu Leu Lys Ile Arg Ser Lys Glu Gly Arg Cys Ala Gln Pro Ser 260 265 270
- Arg Thr Ile Gln Thr Ile Cys Leu Pro Ser Met Tyr Asn Asp Pro Gln 275 280 285
- Phe Gly Thr Ser Cys Glu Ile Thr Gly Phe Gly Lys Glu Asn Ser Thr 290 295 300
- Asp Tyr Leu Tyr Pro Glu Gln Leu Lys Met Thr Val Val Lys Leu Ile 305 310 315 320
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- Thr Lys Met Leu Cys Ala Ala Asp Pro Gln Trp Lys Thr Asp Ser Cys 340 345 350
- Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Ser Leu Gln Gly Arg Met 355 360 365
- Thr Leu Thr Gly Ile Val Ser Trp Gly Arg Gly Cys Ala Leu Lys Asp 370 375 380
- Lys Pro Gly Val Tyr Thr Arg Val Ser His Phe Leu Pro Trp Ile Arg 385 390 395 400
- Ser His Thr Lys Glu Glu Asn Gly Leu Ala Leu
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Cys Pro Lys Lys Phe Gly Gly Gln His Cys Glu Ile Asp Lys Ser Lys
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Asp Thr Met Gly Arg Pro Cys Leu Pro Trp Asn Ser Ala Thr Val Leu
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Ile	Val	Tyr	Leu	Gly 85	Arg	Ser	Arg	Leu	Asn 90	Ser	Asn	Thr	Gln	Gly 95	Glu
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Asp	Thr	Leu 115	Ala	His	His	Asn	Asp 120	Ile	Ala	Leu	Leu	Lys 125	Ile	Arg	Ser
Lys	Glu 130	Gly	Arg	Cys	Ala	Gln 135	Pro	Ser	Arg	Thr	Ile 140	Gln	Thr	Ile	Суя
Leu 145	Pro	Ser	Met	Tyr	Asn 150	Asp	Pro	Gln	Phe	Gly 155	Thr	Ser	Cys	Glu	11e 160
Thr	Gly	Phe	Gly	Lys 165	Glu	Asn	Ser	Thr	Asp 170	Tyr	Leu	Tyr	Pro	Glu 175	Gln
Leu	Lys	Met	Thr 180	Val	Val	Lys	Leu	Ile 185	Ser	His	Arg	Glu	Cys 190	Gln	Gln
Pro	His	Tyr 195	Tyr	Gly	Ser	Glu	Val 200	Thr	Thr	Lys	Met	Leu 205	Cys	Ala	Ala
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Leu 225	Val	Суз	Ser	Leu	Gln 230	G1y	Arg	Met	Thr	Leu 235	Thr	Gly	Ile	Val	Ser 240
Trp	Gly	Arg	Gly	Cys 245	Ala	Leu	Lys	Asp	Lys 250	Pro	Gly	Val	Tyr	Thr 255	Arg

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Val Ser His Phe Leu Pro Trp Ile Arg Ser His Thr Lys Glu Glu Asn

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Gly Lys His Asn Tyr Cys Arg Asn Pro Asp Asn Arg Arg Arg Pro Trp
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Cys Tyr Val Gln Val Gly Leu Lys Pro Leu Val Gln Glu Cys Met Val
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                            120
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Leu Arg Pro Arg Phe Lys Ile Ile Gly Gly Glu Phe Thr Thr Ile Glu
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                                         155
Asn Gln Pro Trp Phe Ala Ala Ile Tyr Arg Arg His Arg Gly Gly Ser
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                                     170
Val Thr Tyr Val Cys Gly Gly Ser Leu Ile Ser Pro Cys Trp Val Ile
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Ser Ala Thr His Cys Phe Ile Asp Tyr Pro Lys Lys Glu Asp Tyr Ile
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Thr Leu Ala His His Asn Asp Ile Ala Leu Leu Lys Ile Arg Ser Lys 245 250 255

Glu Gly Arg Cys Ala Gln Pro Ser Arg Thr Ile Gln Thr Ile Cys Leu 260 265 270

Pro Ser Met Tyr Asn Asp Pro Gln Phe Gly Thr Ser Cys Glu Ile Thr 275 280 285

Gly Phe Gly Lys Glu Asn Ser Thr Asp Tyr Leu Tyr Pro Glu Gln Leu 290 295 300

Lys Met Thr Val Val Lys Leu Ile Ser His Arg Glu Cys Gln Gln Pro 305 310 315 320

His Tyr Tyr Gly Ser Glu Val Thr Thr Lys Met Leu Cys Ala Ala Asp 325 330 335

Pro Gln Trp Lys Thr Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu 340 345 350

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Leu 65	Arg	Pro	Arg	Phe	Lys 70	Ile	Ile	Gly	Gly	Glu 75	Phe	Thr	Thr	Ile	Glu 80
Asn	Gln	Pro	Trp	Phe 85	Ala	Ala	Ile	Tyr	Arg 90	Arg	His	Arg	Gly	Gly 95	Ser
Val	Thr	Tyr	Val 100	Суз	Gly	Gly	Ser	Leu 105	Ile	Ser	Pro	Cys	Trp 110	Val	Ile
Ser	Ala	Thr 115	His	Cys	Phe	Ile	Asp 120	Tyr	Pro	Lys	Lys	Glu 125	Asp	Tyr	Ile
Val	Tyr 130	Leu	Gly	Arg	Ser	Arg 135	Leu	Asn	Ser	Asn	Thr 140	Gln	Gly	Glu	Met
Lys 145	Phe	Glu	Val	Glu	Asn 150	Leu	Ile	Leu	His	Lys 155	Asp	Tyr	Ser	Ala	Asp 160
Thr	Leu	Ala	His	His 165	Asn	Asp	Ile	Ala	Leu 170	Leu	Lys	Ile	Arg	Ser 175	Lys
Glu	Gly	Arg	Cys 180	Ala	Gln	Pro	Ser	Arg 185	Thr	Ile	Gln	Thr	Ile 190	Cys	Leu
Pro	Ser	Met 195	Tyr	Asn	Asp	Pro	Gln 200	Phe	Gly	Thr	Ser	Cys 205	Glu	Ile	Thr
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His	Tyr	Tyr	Gly	Ser 245	Glu	Val	Thr	Thr	Lys 250	Met	Leu	Cys	Ala	Ala 255	Asp
Pro	Gln	Trp	Lys 260	Thr	Asp	Ser	Cys	Gln 265	Gly	Asp	Ser	Gly	Gly 270	Pro	Leu
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Thr Cys Tyr Glu Gly Asn Gly His Phe Tyr Arg Gly Lys Ala Ser Thr 50 55 60

Asp Thr Met Gly Arg Pro Cys Leu Pro Trp Asn Ser Ala Thr Val Leu 65 70 75 80

Gln Gln Thr Tyr His Ala His Arg Ser Asp Ala Leu Gln Leu Gly Leu 85 90 95

Gly Lys His Asn Tyr Cys Arg Asn Pro Asp Asn Arg Arg Pro Trp
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His Asp Cys Ala Asp Gly Lys Lys Pro Ser Ser Pro Pro Glu Glu 130 135 140

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Leu	Gln	Gln	Thr	Tyr	His	Ala	His	Arg	Ser	Asp	Ala	Leu	Gln	Leu	Gly	
		35					40					45				
									_	_	_	_	_	_	_	
Leu	_	Lys	His	Asn	Tyr		Arg	Asn	Pro	Asp		Arg	Arg	Arg	Pro	
	50					55					60					
T~~	Care	Тчх	Val	Gln	77 = T	G] v	T.011	Larg	Pro	T.e.11	Va1	Gl n	Gl 11	Cys	Met	
65	Cyb	-7-	V 0.1	· · · · ·	70	OL,	200	-75		75				-1-	80	
•••					, 0											
Val	His	Asp	Cys	Ala	Asp	Gly	Lys	Lys	Pro	Ser	Ser	Pro	Pro	Glu	Glu	
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